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| APPLICATION NO.            | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-------------|----------------------|---------------------|------------------|
| 10/500,123                 | 06/25/2004  | Toshio Amaya         | 61352-078           | 7357             |
| 20277                      | 7590        | 07/25/2006           | EXAMINER            |                  |
| MCDERMOTT WILL & EMERY LLP |             |                      | LEE, GUNYOUNG T     |                  |
| 600 13TH STREET, N.W.      |             |                      | ART UNIT            |                  |
| WASHINGTON, DC 20005-3096  |             |                      | PAPER NUMBER        |                  |
|                            |             |                      | 2875                |                  |

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/500,123

Applicant(s)

AMAYA, TOSHIO

Examiner

Gunyoung T. Lee

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05/12/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06/25/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/05/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed on May 12, 2006 has been entered:
  - Claims 1-3 have been amended;
  - Claims 1-8 are still pending in this application, with claim 1 being independent.

### *Drawings*

2. The drawings are objected to because of following reasons:
  - Figures 1-4 and 6-7 include a reference character "6" not mentioned in the description;
  - Figures 6 and 7 should be designated by a legend such as "Prior Art" (according to the description in the specification, page 2, lines 3-6), because the legend is necessary in order to clarify what applicant's invention is (see MPEP § 608.02g);
  - The "**a shield portion** of shielding gaps which are formed between the housing and the lighting element and **extend to the light emission face**" must be shown in the drawings or the features should be canceled from the claims, because the drawings must show every feature of the invention specified in the claims (see MPEP § 608.02d).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be

canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

3. Claim 1 is objected to because of the following informality:
  - On lines 6-7, the phrase "a reflector covering a rear face and the facets of the light guiding plate and the slight source" is a repeat of a phrase on lines 4-5.

Appropriate correction is required.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 103***

5. Claims 1-8, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (Fig. 6, Fig. 7) (Specification, page 2, lines 3-6) in view of Ha et al. (US 2002/0186333)

Art Unit: 2875

6. In regard to claims 1-8, as best understood by Examiner, the applicant's admitted prior art discloses a conventional edge light unit having:

- A lighting element (10) provided with a light source (2), a light guiding plate (1) having the light source (2) provided at one of facets thereof and a reflector (3) covering a rear face and facets of the light guiding plate (1) and the light source (2);
- Wherein the light source (2) emits the light from a light emission face (consider a surface abutting to the light guiding plate);
- A housing (30) covering an edge portion of a light emission face of the lighting element (10) (consider the top surface of the light guiding plate), the facets and the rear face of the lighting element (10);
- Heat discharge holes (15) formed in a region of a rear housing (8), wherein the region is located so as to correspond to the rear face of the lighting element (10);
- Wherein the housing (30) comprises a frame portion (9) which covers the edge portion of the light emission face of the lighting element and a rear face supporting portion (8) which covers the rear face of the lighting element and a lower end portion of the frame portion;
- A liquid crystal display (LCD) panel (11) disposed on the light emission face side of the lighting element (10).

7. The applicant's admitted prior art does not expressly disclose a box shaped shielding portion shielding a gap formed between a rear face of a housing and a lighting element and made of a material having heat conductivity higher than that of air. Lewis

Art Unit: 2875

et al. disclose a LCD assembly having a box shaped shielding portion (700) shielding a gap formed between a rear face of a housing (220) and a lighting element (252), and it is well known and available knowledge to one of ordinary skill in the art that LCD components are made of a plastic or metal whose heat conductivity is higher than that of air. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shielding portion of Ha et al. for the applicant's admitted prior art, for the purpose of providing an excellent display quality by discharging heat from the lighting unit.

Please note regarding claim 4 that changing the shape of the shielding portion has been given little patentable weight, since it has been held by the courts that a change in shape or configuration, **without any criticality**, is nothing more than one of numerous shapes that one of ordinary skill in the art would find obvious to provide based on the suitability for the intended final application. See *In re Dailey*, 149 USPQ 47 (CCPA 1966).

### **Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tanaka (US 5,182,660), Shioya et al. (US 5,583,681), Kim (US 2002/0030771), and Weindorf et al. (US 6,930,737) show backlight units.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gunyoung T. Lee whose telephone number is (571) 272-8588. The examiner can normally be reached between 7:30 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached at (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GTL  
7/18/2006



RENEE LUEBKE  
PRIMARY EXAMINER